## RESIDENTIAL PLAN REVIEW CHECKLIST FOR FINISHED BASEMENTS

FREDERICK COUNTY DEPARTMENT OF PERMITS AND INSPECTIONS 30 NORTH MARKET ST., FREDERICK, MARYLAND 21701 (301-600-1086)

| Application N                                      | lo:               | Date:  |
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| То:  |                   | (Applicant) Plan Reviewer:ed for the above referenced project have been reviewed for compliance with the Frederick County Building Code. The   |
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|  |                   | s are noted as non-complying or are not found within the plans and are pointed out for your information.   |
| FOI<br>ONI   | LOWING EX         | FULLY. FAILURE TO COMPLY WITH THE BUILDING CODE WILL RESULT IN A NOTICE OF VIOLATION. THE CERPTS DO NOT ENCOMPASS THE ENTIRE BUILDING CODE OF FREDERICK COUNTY, BUT ARE PROVIDED NOPSIS OF CODE REQUIRMENTS FOR RESIDENTIAL CONSTRUCTION. APPROVED PLANS MUST BE JOB SITE.   |
| Code<br>Section                                    | Comment<br>Number | Synopsis from International Residential Code 2009  |
| Decay &<br>Termite<br>Prot. R317                   | 10b               | Use decay-resistant or treated wood for any wood on concrete slabs which are in direct contact with earth and less than 8" from the exposed ground.  |
| Ceiling<br>Height<br>R305                          | 16                | Habitable rooms, hallways, corridors, bathrooms, toilet rooms, laundry rooms and basements shall have a ceiling height of not less than 7' measured from the finish floor to the lowest projection from the ceiling.  EXCEPTION: Beams, girders, ducts, or other obstructions may not project to within 6 '- 4" of the finished floor.  EXCEPTION: Not more than 50% of the required floor area of a room or space is permitted to have a sloped ceiling less than 7' in height with no portion of the required floor area less than 5' in height. (Spaces with ceiling heights of 7' min. or above are considered habitable). |
| Stairs,<br>Guards, &<br>Railings<br>R311.7<br>R312 | <b>17</b> f       | All interior and exterior stairways shall be provided with a means to illuminate the stairs, including the landings.  Handrail requirements:  1. One side of stairway with four or more risers (right side descending recommended) continuous for full length  2. Graspable per Section R311.7.7.3.  3. Between 34" - 38" above nosing. Projecting from wall min. 1.5" to inner edge and max. 4.5" to outer edge.  4. Ends shall be returned to wall or shall terminate in newel posts or safety terminals.  |
|  | h                 | Guardrail: Open side(s) of stair shall have a guardrail not less than 34" height, measured above tread nosing. Balusters /pickets, intermediate rails, and ornamental closures shall be installed so not to allow passage of a sphere 4" or more in diameter on level surfaces, and no more than a 4-3/8" sphere along a run of stairs.  |
| <b>Landings</b><br>R311.3                          | <b>18</b> a       | shall not be less than the door served. A landing shall be required on each side of an exterior door. The landing at the exterior side shall not be more than 7 3/4" below the top of the threshold. Max. threshold height is 1.5".  |
|  | b                 | There shall be a floor or landing at the top and bottom of each stairway. (Certain exceptions may apply.)  |
| Insulation<br>IECC<br>R316.3                       | <b>20</b> b<br>c  | Exterior walls, including foundation walls shall have a minimum value of R-13 for their full height. Floors over unheated spaces and stairwells shall have a minimum value of R-19.  |
| Exits  | <b>21</b> b       | Min. hall width is 3'.   |
| R310   | C                 | Every sleeping room shall have:  1. An exterior door, or  2. An emergency egress window:   |
| R311   |                   | <ul> <li>Net clear opening of 5.7 sq. ft. (5.0 sq. ft. if a grade floor window)</li> <li>Min. net clear opening height of 24"</li> </ul>   |
| R612.2   |                   | <ul><li>Min. net clear opening width of 20"</li><li>Max. sill height of 44"</li></ul>  |
|  | e                 | All <u>new</u> basements with ceiling heights of 7' or greater shall have at least one operable emergency escape and rescue window or exterior door opening. If window wells are required they too must meet egress requirements (3'x3' min. horizontal area).   |
|  | f                 | If an existing basement is being finished without a means of egress to the outside, then the enclosed accessible space   |

| <b>Glazing</b><br>R308   | 22                      | under the stair is required to have the walls and ceilings protected with I/2" gypsum board.  Safety glazing is required in the following areas: all glass doors, side lights, and windows within 24" of a door frame (to height of 60"), areas around showers, tubs, spas/pools, stair landings, railing/guardrails, walking surfaces. Windows with sill height of less than 18" to the floor <b>AND</b> greater than 9 sq. ft. in glazing area will require safety glazing. For further information see Section R308.4, and Glazing Handout. <b>Note:</b> Laminated plastic glazing and safety film do not pass for safety glazing unless further documentation is provided and approved by the local Administrative Authority. |
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| Light and<br>Ventilation<br>R303                               | <b>26</b> a<br>b.       | All habitable rooms shall be provided with a total glazing area of not less than 8% of the floor area of such rooms. One-half of required glazing shall be openable. <b>EXCEPTION</b> : The glazed areas need not be openable where an approved mechanical ventilation system is provided capable of producing .35 air change per hour in that room or a whole house system - and the opening is not required by Section 310 (Exits). (Glazing not required if artificial light is provided.)  Bathrooms: 3 sq. ft. glazed, 1/2 openable. <b>EXCEPTION</b> : Not required if artificial light and mechanical ventilation  |
|  |                         | capable of 50 cfm intermittent or 20 cfm continuous. Vent must discharge directly outside of the building envelope.   |
| Fixture<br>Clearance<br>R305 &<br>R307.1<br>R307.2<br>R702.4.2 | 27a<br>b<br>c<br>d<br>e | Each water closet shall have a min. 15" clear each side of center line and 21" to front.  Clearance at shower stall is min. 24" in front of opening.  Bathrooms shall have a min. ceiling height clearance of 6'8" at the center of front clearance area for fixtures.  Min. size for a shower is 30" x 30" interior cross-section.  Wall surfaces around showers should be a nonabsorbent surface and shall extend to a height of not less than 6' above the drain. Cement, fiber-cement or glass mat gypsum backers shall be used as backers for all tile in tub and shower areas and wall panels in shower areas.  |
| Smoke<br>Alarms<br>R314.3.1                                    | <b>28</b> a             | Smoke alarms shall be installed in each sleeping room, outside the immediate vicinity of each separate sleeping area, and on each additional story of the dwelling, including basements, cellars, and habitable attics, but not required in crawl spaces, uninhabitable attics, and garages. Smoke alarms shall be interconnected and hard wired with battery back-up.  Renovations require compliance with the above. If not readily accessible, hardwiring and interconnection are not required.  |
| Carbon<br>Monoxide<br>Detector<br>R315                         | <b>29</b> a<br>b        | For new/renovation construction, an approved carbon monoxide alarm shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms in dwelling units within which fuel-fired appliances are installed and in dwelling units that have attached garages.  If there is a fuel-fired appliance within a sleeping space, an additional carbon monoxide detector is required within the space.   |
| Sprinklers<br>(County<br>Ordinance)                            | <b>30</b> a<br>b        | Per Frederick County Ordinance all dwelling units are required to be sprinklered. Separate permit required. Contact the Department of Life Safety for additional information at 301-600-3463. For Townhouses and single family homes that have existing sprinkler systems—Every room, except bathrooms less than 55 sq. ft. and small closets, shall have fire sprinkler protection. Sprinklers shall be a minimum of 4 inches off any wall and a maximum of 8 feet off any wall.   |